

Deforestation – A Global Threat

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Abstract

“We simply term the loss of trees as deforestation. But we often forget that the major contributor and cause of deforestation is a human”. The clearance or demolition of an existing natural vegetation, especially a forest is termed as deforestation. In simple words, deforestation is the destruction of large forest areas. Deforestation is considered to be permanent and a large-scale conversion of forests into barren or farm lands. These basic aspects and definitions of deforestation are necessary to understand and analyse their effects on biodiversity.

Keywords : Deforestation, global threat, Artificial disaster, cutting trees, forest distraction.

1. Introduction

During the latter half of the twentieth century, the world saw spikes in population. This led to an inefficiency in usage of the available land for human usage. Instead of making things right, the government and its officials executed the escape plan termed as deforestation. This, at an early stage seemed good as there was enough timber production and sufficient space for livelihood and agriculture. But the population trouble never ceased. So, there was a growing demand for more space in the subsequent years.



Fig.1 Global Deforestation leading to natural calamities

Figure 1 shows the image of global deforestation that leads to natural calamities. During the time of industrial revolution, the need for large construction areas grew. This concern, along with the population outgrowth started to become the doom for forest areas. The 20th century saw the peak of deforestation. The world

deforestation stats show that nearly one third of forest lands were cut down during that period. From 1990 to 2016, nearly 1.3 million square kilometres of forest land was cleared. This area equals the land of South Africa.

The impact of tropical deforestation on climate and agriculture is discussed in [3]. The author also claims that deforesting the tropics fully might result in global warming comparable to that produced by fossil fuel use since 1850, with additional heat and significant dryness in the tropics. The authors of [4] have identified hotspot locations where forest loss should be avoided in order to preserve the Amazon forest's biological integrity. [5] investigated a quantitative literature review based on scholarly papers on governance and deforestation. The rest of the paper is organized as follows. Chapter 2 discusses about the Damages and Effects of Deforestation, Chapter 3 about the Physical and Social Conflicts, Chapter 4 on Mental and Cultural Conflicts, existing solutions and what else can be done in Future is discussed in chapters 5 and 6 with Conclusion in Chapter 7.

2. Damages and Effects

Now that we have discussed the causes and reasons of deforestation, let us analyse the effects and damages of deforestation. Basically, we all know that trees provide all fundamental aspects essential for human survival. For e.g., Trees provide oxygen by taking up carbon dioxide, and play a major role in water cycle by undergoing transpiration. But apart from these, trees contribute a lot more towards nature and biodiversity.

3. Physical and Social Conflicts

Trees are storehouses of biodiversity. Their loss decreases the amount of biodiversity leading to plant and animal extinction [1]. This ultimately reduces the number of hosts for some pathogens present in forests. This indirectly says that deforestation has increased only human presence in forest related areas. So, humans come in contact with pathogens whose behaviour might be quite dangerous and threatening. To say in short, deforestation has increased the outbreak of new diseases and infections. Deforestation can deprive a country of potential renewable revenue and also displace valuable productive lands with nearly worthless bush and pasture. Tropical forests are valuable natural resources that can help contribute to long-term national economic development. Their loss through deforestation leads to lack of timber, edibles, water and other precious renewable resources. This creates a food security risk to forest-dependent populations and loss of renewable resources valuable for human survival.



Fig.2 Representation of cutting of forests [6]

Trees regulate rainfall and help in water cycle. Though a quite familiar point, there are much deeper aspects to look out for. Deforestation, leading to reduced transpiration, disturbs rainfall trends, resulting to an increase in drought in surrounding areas [2]. Deforestation disrupts forest dependent livelihoods, ultimately leading them to go to farms and grasslands. This leads to a shift of population from their native place to an unfamiliar and foreign place as refugees.

Figure 2 represents the image of how the world is affected by cutting the trees.

4. Mental and Cultural Conflicts

Deforestation sites have become areas where human - animal conflict is very high. Animals, in order to prevent the loss of their habitats, try to retaliate. Their fight against humans lead to conflicts and peace disruptions. The consequences of these statements are shift of animal groups to city areas due to loss of habitats and human survival among predators. Deforestation is also the cause of some cultural problems and conflicts. Deforestation can sever religious and cultural ties between people and forests, resulting in the loss of traditional forest awareness. Figure 3 represents the image of deforestation worldwide.



Fig.3 Image representation of Deforestation worldwide. [7]

5. Existing Solutions

The past ten years have seen a decrease in deforestation rates, and the number of trees per person has increased. Certain NGOs and governmental organizations have taken up this problem as a challenge and have protected their surrounding flora and fauna up to a certain extent. Not only that, but a majority of world populations have become aware of the rates of deforestation and have planned to increase the count of trees in their neighbourhood. Many organisations have insisted to plant saplings to increase afforestation rates.

6. What Else Can Be Done

Correct and optimal planning must be done to manage the available resources and land area. That would reduce the necessity of extending land area. Further, donating or gifting saplings for birthdays or parties could create great awareness for people attending those occasions. Hosting afforestation camps over a very wide scale could provide great curiosity and interest to children attending those camps. Hence, we can assure that deforestation could be reduced in the future. Forest related programs and courses must be conducted to spread great knowledge about forests, its types, its composition, etc. This would enhance the views and perspectives of forests among the youth and would force them to take up the threatening problem of deforestation.

7. Conclusion

In the current scenario, deforestation has started to get more importance and hence, has started to significantly reduce. So, deforestation has now lost its status of a very highly alarming problem. When people are aware of the consequences which would happen if any problem continues without being stopped, then the problems start to lose their terrorising ability. Deforestation wouldn't be a problem if we can protect the nature by improving it. A person's awareness is his driving force. Remember, when we cut trees, we cut our tradition and cultural values. Empathy is the key to solve deforestation. Put yourselves in the shoes of the nature or the trees, then you wouldn't consider deforestation as an option for land optimisation. Thank you.

References

1. <https://rainforests.mongabay.com/deforestation/>
2. <https://www.britannica.com/science/deforestation>
3. Lawrence, Deborah, and Karen Vandecar. "Effects of tropical deforestation on climate and agriculture." *Nature climate change* 5.1 (2015): 27-36.
4. Zemp, D. C., et al. "Deforestation effects on Amazon forest resilience." *Geophysical Research Letters* 44.12 (2017): 6182-6190.
5. Fischer, Richard, Lukas Giessen, and Sven Günter. "Governance effects on deforestation in the tropics: a review of the evidence." *Environmental Science & Policy* 105 (2020): 84-101.
6. <https://theglobalamericans.org/2021/04/biden-and-bolsonaro-face-off-over-deforestation-in-the-brazilian-amazon/>
7. <https://therealcartoon.blogspot.com/2016/09/political-cartoon-amazon-rainforest.html?m=0>